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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,224	07/17/2006	Shinji Sasaki	OKUDP0173US	7930

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EXAMINER
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ORTIZ CRIADO, JORGE L

ART UNIT	PAPER NUMBER
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2627

MAIL DATE	DELIVERY MODE
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10/16/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/597,224	<b>Applicant(s)</b> SASAKI, SHINJI	
	<b>Examiner</b> JORGE L. ORTIZ CRIADO	<b>Art Unit</b> 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 July 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Drawings***

Figures 1, 2 and 3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. in combination with 6,160,778 Shim US Pat. No. 6,259,458 and further in view of

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Regarding claim 1:

It is well known in the art that for a first storage medium accommodated in a cartridge in comparison with a second storage medium not accommodated in a cartridge is more likely to have a higher number of defective areas. Also it is well known that for provide reliability to those bare discs not accommodated in a cartridge spare areas are allocated in the recording medium to perform defect management (see for instance example Ito et al. col. 3, lines 1-8).

It is understood that a disk with a cartridge would be less likely to have as many defects as such bare discs. Therefore, one of an ordinary skill in the art would have understood that the number of spare areas in a cartridge type of disk is not as necessary as in the other bare disk.

Furthermore, Ito et al teaches because of the drawbacks of a bare disk of having more defects encountered, spare areas should be allocated.

Shim et al. discloses information processing apparatus capable of mounting a storage medium having a data recording area, the data recording area including a user area to which logical addresses are allocated in accordance with recording units having a processor for, giving an instruction that, when the storage medium has been mounted, all area of the data recording area be formed as the user area, and a recording section for, based on the instruction, forming the user area in the data recording area of the mount storage medium (see Figs. 5-9).

On of an ordinary skill in the art would have found obvious to form all the data recording area be formed as the user area thus preventing a reduction of a recording capacity, an in

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particular forming such data recording area as the user area areas in the cartridge disk above and or any other disk, because it suits the no need of unnecessary spare areas.

As in the combination above specified it is suggested to provide spare areas or not as desired, reasons to whether to make a disk more reliable, as need it for a bare disk or make any disk, particularly a cartridge disk with high sorting capacity.

The further elements of the claim of a determination section for, based on physical characteristics of the mounted storage medium, determining which one of a first storage medium accommodated in a cartridge and a second storage medium not accommodated in a cartridge has been mounted, is well known in the art and is evidenced by Fujita (see Abstract for instance Fig. 1-4).

It would have been obvious to provide for such discrimination at the time of assigning the recording areas as user/spare areas above suggested for the different discs in order to alternatively provide for reliability on a disk or high storage capacity as desired, as taught above.

Regarding claim 2, the combination above shows that wherein the determination section determines mounting of one of the first storage medium and the second storage medium based on physical characteristics of the storage medium which differ based on presence or absence of a cartridge (see Fujita [0026]).

Regarding claim 3, the combination above shows a detection section (401) for outputting different signals based on a change in physical state that is based on a physical shape of the

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cartridge, wherein the determination section determines which one of the first storage medium and the second storage medium has been mounted based on the signal which is output from the detection section (see Fujita [0025]).

Regarding claims 4, 5, 6, 7, 9 and 10, the combination outlined above shows whether the first storage medium and the second storage medium have substantially same recording capacity (see for Shim DVD-RAM disks, among them exist cartridge types and non cartridge types).

Furthermore, the combination would show a third storage medium (see for instance Shim col. 1, lines 13-25; e.g. DVD-ROMs, CDs; cartridge types).

Furthermore, any variation of a third storage medium is a storage medium well known in the art as admitted by the Applicant (e.g. DVD-RAM, BD; known optical disk standards).

Determination sections that determines mounting of the third storage medium based on recording capacity, indication recorded on the storage medium, number of recording layers, physical shape and/or physical parameter and information stored identifying the type, are merely the well established known techniques and standards of discrimination of optical disk storage mediums, and the examiner take Official Notice.

Regarding claim 8, provision of several determination sections (first, second, third, etc.) from the above would have been obvious to enhance the discrimination operation by provision of redundancy and discrimination of more types of disks, and it would have been obvious to an ordinary skill in the art.

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Regarding claim 11, the combination above shows wherein the processor gives an instruction that a data area and duplicated file management areas be allocated in the user area when the first storage medium has been mounted (see Shim Figs. 5, 8; file system method).

Method claim 12 is drawn to the method performed by the apparatus of claim 1 above, and is rejected for the same reasons of obviousness.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JORGE L. ORTIZ CRIADO whose telephone number is (571)272-7624. The examiner can normally be reached on Mon.-Fri 10:00 am- 6:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jorge L Ortiz-Criado/  
Primary Examiner, Art Unit 2627